



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,102	08/14/2006	Anthony Scott Oddo	60136.0106USWO	4310
94140	7590	03/24/2010		
Merchant & Gould - Cox PO Box 2903 Minneapolis, MN 55402			EXAMINER LOFTIS, JOHNNA RONEE	
			ART UNIT 3624	PAPER NUMBER
			MAIL DATE 03/24/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,102	Applicant(s) ODDO, ANTHONY SCOTT	
	Examiner JOHNNA R. LOFTIS	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 43-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 43-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/26/05, 4/3/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a first office action upon examination of application number. The preliminary amendment filed 9/26/05 has been entered. Claims 2-42 cancelled. Claims 43-67 added. Claims 1 and 43-67 are pending and have been examined on the merits discussed below.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 9/26/05 and 4/3/06 were filed in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 43-47, 49 and 50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876); *In re Bilski*, 88 USPQ2d 1385 IFed. Cir. 2008). Also see USPTO Memoranda, "Guidance for Examining Process Claims in view of *In re Bilski*," January 7, 2009 and "New Interim Patent Subject

Art Unit: 3624

Matter Eligibility Examination Instructions," August 24, 2009. Both memoranda may be located on the USPTO website at:

<http://www.uspto.gov/web/patents/memoranda.htm>

There are two corollaries to the machine-or-transformation test. First, a mere field of use limitation is generally insufficient to render an otherwise ineligible method claim patentable. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test. If neither of these requirements are met by the claims, the method is not a patent eligible process under 35 USC 101 and is non-statutory subject matter.

Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. The use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See *Benson*, 409 U.S. at 71-72. Further, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. See *Flook*, 437 U.S. at 590. Incidental physical limitations, such as data gathering, field of use limitations, and extra-solution activity is not enough to convert an abstract idea into a statutory process (*In re Bilski*, 88 USPQ2d 1385, 1385 (Fed Cir. 2008)). In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one. It is further noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to

Art Unit: 3624

patentably limit the scope of the claim does not make the claim statutory under 35 USC 101, as seen in the Board of Patent Appeals Informative Opinion *Ex Parte Langemyr et al.* (*Appeal 2008-1495*).

Regarding the “transformation” prong, the data provided by the claimed invention do not represent physical and tangible objects. Rather, the claimed data represent conceptual and theoretical values. This is different than the discussion of Abele held by Bilski, in which “X-ray attenuation data produced in a two dimensional field by a computed tomography scanner” was deemed to represent physical and tangible objects, because it “clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues..... the transformation of that raw data into a particular visual depiction of a physical object on a display”, resulting in a transformation of data that rendered the process patent-eligible. Thus, the claimed invention does not rise to the level of Abele in transforming electronically-manipulated data into patent-eligible subject matter.

Here, applicant’s method steps, fail the first prong since they only recite a nominal recitation of a particular machine or apparatus. Similarly, the applicant’s method steps fail the second prong because they do not result in a transformation of subject matter into another state or thing. Thus, claims 1, 43-47, 49 and 50 are non-statutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 43-49 and 52 rejected under 35 U.S.C. 102(a and e) as being anticipated by Welsh et al, US 6757691.

As per claim 1, Welsh et al teaches providing a database containing a plurality of user input pattern profiles representing a group of users of a terminal device, wherein each user of the group is associated with one of the plurality of user input pattern profiles (column 7, lines 13-39 – user input pattern is collected and stored as profile representing user input at a terminal device; column 8, lines 37-57 – psychographic identifier (PID) linked with psychographic profile); detecting a user input pattern based upon use of the terminal device by a current user (column 7, lines 13-39 – user input detected and stored); dynamically matching the user input pattern of the

Art Unit: 3624

current user with one of the user input pattern profiles contained in the database (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated); identifying the current user based upon dynamic matching of the user input pattern generated by the current user with one of the user input pattern profiles (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated); processing each user input pattern profile to identify a demographic type (column 10, lines 38-60 – demographic type is identified); providing a plurality of biometric behavior models wherein each biometric behavior model identifies a unique demographic type (column 8, lines 20-64 and column 10, lines 1-60 - (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated; column 10, lines 38-60 – demographic type is identified); comparing each user input pattern profile against the plurality of biometric behavior models to match each user input pattern profile with one of the biometric behavior models such that each user input pattern profile is correlated with one demographic type (column 10, lines 1-60 and column 13, lines 15-40 – comparing user input to produce a match with a psychographic profile; wherein the data is correlated with other users demographics); and generating an audience analytic based upon the identified demographic types (column 7, lines 13-39 – yields accurate user preferences for psychographic profiling).

2-42. (canceled)

As per claim 43, Welsh et al teaches the user input pattern of the current user comprises clickstream data (column 7, lines 13-39).

As per claim 44, Welsh et al teaches the clickstream data relates to particular Web sites visited by the user or the duration of visits to the Web sites (column 7, lines 13-39).

Art Unit: 3624

As per claim 45, Welsh et al teaches the database providing step comprises generating a user input pattern profile for each user based upon clickstream data generated by the user when using the terminal device (column 7, lines 13-39).

As per claim 46, Welsh et al teaches the user input pattern comprises one or more of user keystroke data, mouse usage data and remote control usage data (column 7, lines 13-39).

As per claim 47, Welsh et al teaches the terminal device comprises one of a computer and a set top box (column 7, lines 6-39 and column 9, lines 33-49).

As per claim 48, Welsh et al teaches the steps are implemented in a computer, and the computer communicates with the terminal device over a network; the network comprising one or more of the Internet and a nodal television distribution network (column 9, lines 33-49 – computer implemented over the Internet).

As per claim 49, Welsh et al teaches transmitting one or more of targeted content and targeted advertising to the user in accordance with the dynamically-matched user input pattern profile (column 8, lines 46-58).

As per claim 52, it is the system with means for performing the method of claim 1.
Therefore, the same art and rationale apply.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 50, 51 and 53-67 rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al, US 6757691, in view of Cerrato, US 7092926.

As per claim 50, Welsh et al teaches providing a database containing a plurality of user input pattern profiles representing a group of users of a terminal device, wherein each user of the group is associated with one of the plurality of user input pattern profiles (column 7, lines 13-39 – user input pattern is collected and stored as profile representing user input at a terminal device; column 8, lines 37-57 – psychographic identifier (PID) linked with psychographic profile); detecting a user input pattern based upon use of the terminal device by a current user; dynamically matching the user input pattern of the current user with one of the user input pattern profiles contained in the database(column 7, lines 13-39 – user input detected and stored); dynamically matching the user input pattern of the current user with one of the user input pattern profiles contained in the database (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated); identifying the current user based upon dynamic matching of the user input pattern generated by the current user with one of the user input pattern profiles (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated); processing each user input pattern profile to identify a demographic type (column 10, lines 38-60 – demographic type is identified);

Art Unit: 3624

providing a plurality of biometric behavior models wherein each biometric behavior model identifies a unique demographic type (column 8, lines 20-64 and column 10, lines 1-60 - (column 8, lines 20-45 – based on data that is collected and stored, psychographic profile is created and a PID is associated; column 10, lines 38-60 – demographic type is identified); comparing each user input pattern profile against the plurality of biometric behavior models to match each user input pattern profile with one of the biometric behavior models such that each user input pattern profile is correlated with one demographic type (column 10, lines 1-60 and column 13, lines 15-40 – comparing user input to produce a match with a psychographic profile; wherein the data is correlated with other users demographics); and generating an audience analytic based upon the identified demographic types (column 7, lines 13-39 – yields accurate user preferences for psychographic profiling). Welsh et al does not explicitly teach using one or more of a clickstream algorithm, a tracking algorithm, and Bayes classifier algorithm and an affinity-day part algorithm to generate the plurality of user input pattern profiles. Ceratto teaches the use of clickstream algorithm to extract distinguishing features from clickstreams generating by users (figure 2, column 5, lines 9-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the system of Welsh et al the ability to extract distinguishing features of clickstreams using clickstream algorithms as taught by Ceratto since the claimed invention is merely a combination of old elements and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 51, it is the system with means for performing the method of claim 50.

Therefore, the same art and rationale apply.

As per claim 53, Welsh et al teaches the user input pattern of the current user comprises clickstream data (column 7, lines 13-39).

AS per claim 54, Welsh et al teaches the clickstream data relates to particular Web sites visited by the user or the duration of visits to the Web sites (column 7, lines 13-39).

As per claim 55, Welsh et al teaches the database providing step comprises generating a user input pattern profile for each user based upon clickstream data generated by the user when using the terminal device (column 7, lines 13-39).

As per claim 56, Welsh et al teaches the uses input pattern comprises user keystroke data (column 7, lines 13-39).

As per claim 57, Welsh et al teaches collecting keystroke data, but does not explicitly teach the keystroke data comprises digraph interval data. Cerrato teaches collecting usage characteristics to identify client users from behavioral data. One such characteristic is the digraph interval (column 8, lines 1-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the system of Welsh et al the ability to track the digraph interval as taught by Cerrato since the claimed invention is merely a combination of old elements and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 58, Welsh et al teaches the user input pattern comprises user mouse usage data (column 7, lines 13-39).

As per claim 59, Welsh et al teaches the user input pattern comprises user remote control usage data (column 7, lines 13-39).

Art Unit: 3624

As per claim 60, Welsh et al teaches the terminal device comprises a computer (column 7, lines 6-39 and column 9, lines 33-49).

As per claim 61, Welsh et al teaches the terminal device comprises a television set top box (column 7, lines 6-39 and column 9, lines 33-49).

As per claim 62, Welsh et al teaches the steps are implemented in a computer, and the computer communicates with the terminal device over a network (column 9, lines 33-49).

As per claim 63, Welsh et al teaches the network comprises the Internet (column 9, lines 33-49).

As per claim 64, Welsh et al teaches the network comprises a nodal television distribution network (column 9, lines 33-49).

As per claim 65, Welsh et al teaches detecting user input patterns, but does not explicitly teach using a fusion algorithm. Cerrato teaches using a fusion algorithm for identifying a unique user form multiple sources of input data (figure 3, and at least column 9, lines 15-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the system of Welsh et al the usage of a fusion algorithm to identify user input patterns as taught by Cerrato since the claimed invention is merely a combination of old elements and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 66, Welsh et al teaches transmitting targeted content to the current user in accordance with the dynamically-matched user input pattern profile (column 8, lines 46-58).

Art Unit: 3624

As per claim 67, Welsh et al teaches transmitting targeted advertising to the current user in accordance with the dynamically-matched user input pattern profile (column 8, lines 46-58).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roth et al, US 6285987 – internet advertising system

Bull et al, US 6208978 – information aggregation and synthesization system

Capek, US 6112192 – method for providing individually customized content in a network

Herz et al, US 6088722 – system and method for scheduling broadcast of and access to video programs and other data using customer profiles

Levine, US 6385590 – method and system for determining the effectiveness of a stimulus

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHNNA R. LOFTIS whose telephone number is (571)272-6736. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Johnna R Loftis/
Examiner, Art Unit 3624